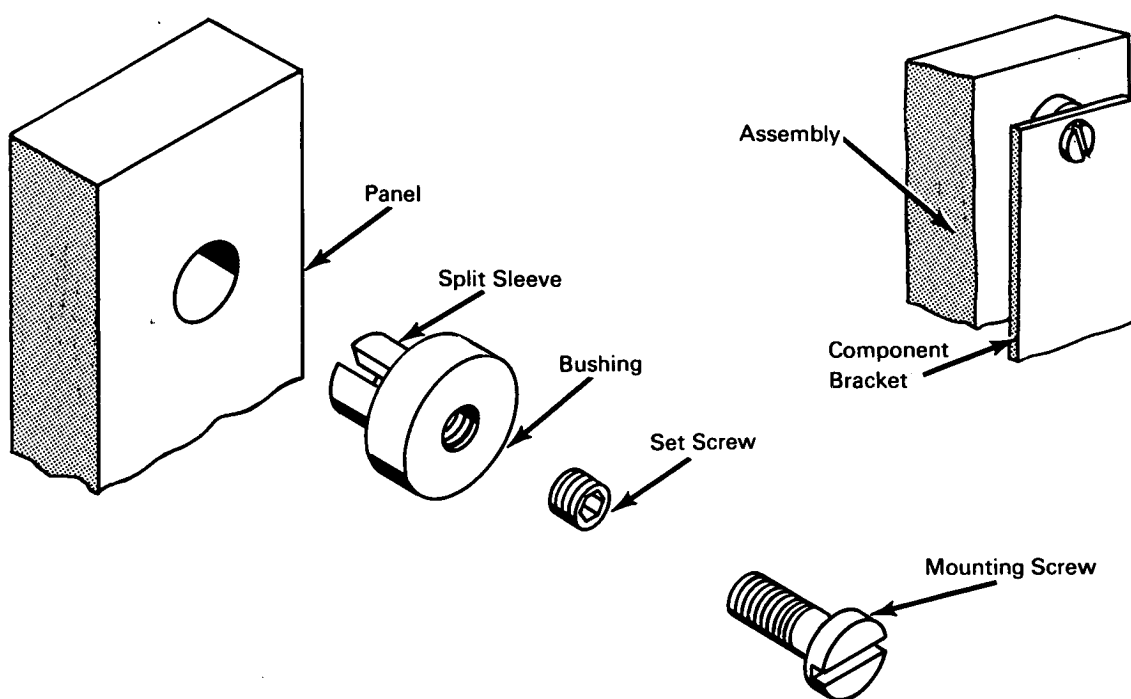


NASA TECH BRIEF



NASA Tech Briefs are issued to summarize specific innovations derived from the U. S. space program and to encourage their commercial application. Copies are available to the public from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.

Expandable Insert Serves As Screw Anchor



The problem:

To secure components to panels having only one accessible side. Mounting holes in the panels may not necessarily be threaded to accommodate screws or bolts.

The solution:

An expandable self-locking adapter containing a female thread that will mate with a mounting screw.

How it's done:

The adapter, made of metallic or nonmetallic material, has a bushing and a split sleeve which fits

inside a mounting hole in the panel. The sleeve is internally threaded to receive a short Allen head set screw, and the bushing is threaded to receive a mounting screw.

The adapter is securely fastened to the panel by inserting the sleeve into a mounting hole and tightening the set screw with an Allen key to expand the split end of the sleeve against the surface of the mounting hole. A mounting screw may then be inserted in the threaded bushing and tightened with a screw driver.

(continued overleaf)

Notes:

1. The bushing may be secured in threaded as well as unthreaded holes.
2. This adapter should have application for electronic and mechanical assembly work and for attaching various household appliances and fixtures to solid panels.
3. Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
Houston, Texas, 77001
Reference: B66-10132

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C., 20546.

Source: North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-301)